

## CLAIMS

What is claimed is:

- Sub Q2 1.
1. A system for presenting and paying bills, comprising:
- a. parsing functionality which is adapted to parse billing data from a plurality of billers using rules according to which the parsing functionality is programmed, corresponding to a plurality of data types, and to provide relevant information for further use by said system;
  - b. a common document model processing functionality adapted to transform said relevant information into a common document model, which common document model is adapted to accommodate said relevant information from the plurality of billers and according to the plurality of data types;
  - c. a database adapted to store the transformed information from the common document model processing functionality; and
  - d. presentation functionality adapted to retrieve information from said database and output at least some of said information via a network for use by bill payers.
2. A system according to claim 1 in which the parsing functionality is adapted to parse data from a print stream of data provided by a biller.

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Q2

- to claim 1 in  
data stream
- to claim 1 in  
e by bill pay
- to claim 1 in  
e by bill pay
- to claim 6 in  
e by bill pay
- to claim 1 in  
order to rene
- to claim 6 in
- ting and pay

a. parsing functionality which is adapted to parse billing data from a plurality of billers using rules according to which the parsing functionality is programmed, corresponding to a plurality of data types, and to provide relevant information for further use by said system;

b. a common document model processing functionality adapted to transform said relevant information into a common document model, which common document model is adapted to accommodate said relevant information from the plurality of billers and according to the plurality of data types;

c. a database adapted to store the transformed information from the common document model processing functionality; and

d. presentation functionality adapted to retrieve information from said database and output at least some of said information via a network for use by bill payers; and

e. an interactivity functionality adapted to detect and respond to communications from a bill payer, by at least (i) retrieving information from said database and presenting it to said bill payer in a form requested by said bill payer; and (ii) altering information in said database corresponding to said bill payer according to said communications.

11. A system for presenting and paying bills, comprising:

a. parsing functionality which is adapted to parse billing data from a plurality of billers using rules according to which the parsing functionality is programmed, said

billing data corresponding to a plurality of data types, and to provide relevant information for further use by said system;

b. a common document model processing functionality adapted to transform said relevant information into a common document model, which common document model is adapted to accommodate said relevant information from the plurality of billers and according to the plurality of data types;

c. a database adapted to store the transformed information from the common document model processing functionality; and

d. presentation functionality adapted to retrieve information from said database and output at least some of said information via a network for use by bill payers; and

e. interactivity functionality adapted to detect and respond to communications from a biller, by at least retrieving information from said database corresponding to said biller and presenting it to said biller in a form requested by said biller.

12. A system according to claim 11 further comprising interactivity functionality adapted to detect and respond to communications from a bill payer, by at least (i) retrieving information from said database and presenting it to said bill payer in a form requested by said bill payer; and (ii) altering information in said database corresponding to said bill payer according to said communications.

13. A system for presenting and paying bills, comprising:

a. parsing functionality which is adapted to parse billing data from a plurality of billers using rules according to which the parsing functionality is programmed, said billing data corresponding to a plurality of data types, and to provide relevant information for further use by said system;

b. a common document model processing functionality adapted to transform said relevant information into a common document model, which common document model is adapted to accommodate said relevant information from the plurality of billers and according to the plurality of data types;

c. a database adapted to store the transformed information from the common document model processing functionality; and

d. a presentation functionality adapted to retrieve information from said database and output at least some of said information via a network for use by bill payers; and

e. a biller interface coupled to said database adapted to allow a biller to alter appearance and content of bills presented to bill payers.

14. A system according to claim 13 in which the biller interface is further adapted to allow the biller to communicate with bill payers regarding bills.

15. A system according to claim 13 further comprising interactivity functionality adapted to detect and respond to communications from the biller, by at least retrieving

information from said database corresponding to said biller and presenting it to said biller in a form requested by said biller.

16. A system according to claim 13 further comprising interactivity functionality adapted to detect and respond to communications from a bill payer, by at least (i) retrieving information from said database and presenting it to said bill payer in a form requested by said bill payer; and (ii) altering information in said database corresponding to said bill payer according to said communications.

17. A system for presenting and paying bills, comprising:

a. parsing functionality which is adapted to parse billing data from a plurality of billers using rules according to which the extractor is programmed, said billing data corresponding to a plurality of data types, and to provide relevant information for further use by said system;

b. a common document model processing functionality adapted to transform said relevant information into a common document model, which common document model is adapted to accommodate said relevant information from the plurality of billers and according to the plurality of data types;

c. a database adapted to store the transformed information from the common document model processing functionality; and

d. presentation functionality adapted to retrieve information from said database and output at least some of said information via a network for use by bill payers; and

e. a financial source interface adapted to send and receive communications to and from at least one financial entity and to alter information in said database according to said financial source communications.

18. A system for presenting and paying bills, comprising:

a. parsing functionality which is adapted to parse billing data from a plurality of billers using rules according to which the extractor is programmed, said billing data corresponding to a plurality of data types, and to provide relevant information for further use by said system;

b. a common document model processing functionality adapted to transform said relevant information into a common document model, which common document model is adapted to accommodate relevant information from the plurality of billers and according to the plurality of data types;

c. a database adapted to store the transformed information from the common document model processing functionality; and

d. a presentation functionality adapted to retrieve information from said database and output at least some of said information via a network for use by bill payers;

e. interactivity functionality adapted to detect and respond to communications from a bill payer regarding at least one of said bill payer's bills presented by said system, by at least (i) retrieving information from said database and presenting it to said bill payer in a form requested by said bill payer; and (ii) altering information in said database corresponding to said bill payer according to said communications; and

f. a financial source interface adapted to send and receive communications to and from at least one financial entity based at least in part on communications from said bill payer and to alter information in said database corresponding to said bill of said payer, according at least in part to said financial source communications.

19. A system according to claim 18 further comprising interactivity functionality adapted to detect and respond to communications from a biller, by at least retrieving information from said database corresponding to said biller and presenting it to said biller in a form requested by said biller.

20. A system according to claim 18 in which said interactivity functionality is adapted to report information to billers relating at least to status of payment on their bills presented by said system.

21. A method of providing electronic bill presentment and payment services, comprising the steps of:





26. The method of claim 21 in which said at least some of said information is output for use by bill payers not using financial software.

27. The method of claim 21 in which said at least some of said information is output for use by bill payers using a browser.

28. The method of claim 21 in which said at least some of said information is output using style sheet functionality in order to render information in a form suitable for bill payers.

29. The method of claim 26 in which said at least some of said information is provided to bill payers using markup language.

30. A method of providing electronic bill presentment and payment services, comprising the steps of:

- a. extracting relevant information from billing data, corresponding to a plurality of data types, from a plurality of billers using rules;
- b. transforming said relevant information into a common document model, which common document model is adapted to accommodate said relevant information from the plurality of billers and according to the plurality of data types;
- c. storing the transformed information from the common document model in a database; and

d. retrieving said transformed information from said database and outputting at least some of said information via a network for use by bill payers; and

e. detecting and responding to communications from a bill payer, by at least (i) retrieving information from said database and presenting it to said bill payer in a form requested by said bill payer; and (ii) altering information in said database corresponding to said bill payer according to said communications.

*Rule 31*  
*26*  
32. A method of providing electronic bill presentment and payment services, comprising the steps of:

a. extracting relevant information from billing data, corresponding to a plurality of data types, from a plurality of billers using rules;

b. transforming said relevant information into a common document model, which common document model is adapted to accommodate said relevant information from the plurality of billers and according to the plurality of data types;

c. storing the transformed information from the common document model in a database; and

d. retrieving said transformed information from said database and outputting at least some of said information via a network for use by bill payers; and

f. detecting and responding to communications from a biller, by at least retrieving information from said database corresponding to said biller and presenting it to said biller in a form requested by said biller.

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A method of providing electronic bill presentment and payment services, comprising the steps of:

- a. extracting relevant information from billing data, corresponding to a plurality of data types, from a plurality of billers using rules;
- b. transforming said relevant information into a common document model, which common document model is adapted to accommodate said relevant information from the plurality of billers and according to the plurality of data types;
- c. storing the transformed information from the common document model in a database; and
- d. retrieving said transformed information from said database and outputting at least some of said information via a network for use by bill payers; and
- e. allowing a biller to alter appearance and content of bills presented to bill payers.

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The method of claim 33 further comprising the step of allowing the biller to communicate with bill payers regarding bills.

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A method of providing electronic bill presentment and payment services, comprising the steps of:

- a. extracting relevant information from billing data, corresponding to a plurality of data types, from a plurality of billers using rules;

- b. transforming said relevant information into a common document model, which common document model is adapted to accommodate said relevant information from the plurality of billers and according to the plurality of data types;
- c. storing the transformed information from the common document model in a database; and
- d. retrieving said transformed information from said database and outputting at least some of said information via a network for use by bill payers; and
- e. sending and receiving communications to and from at least one financial entity and altering and storing information according to said communications.

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36. A method of providing electronic bill presentment and payment services, comprising the steps of:

- a. extracting relevant information from billing data, corresponding to a plurality of data types, from a plurality of billers using rules;
- b. transforming said relevant information into a common document model, which common document model is adapted to accommodate said relevant information from the plurality of billers and according to the plurality of data types;
- c. storing the transformed information from the common document model in a database; and
- d. retrieving said transformed information from said database and outputting at least some of said information via a network for use by bill payers;

e. detecting and responding to communications from a bill payer regarding at least one of said payer's bills presented by said system, by at least (i) retrieving information from said database and presenting it to said bill payer in a form requested by said bill payer; and (ii) altering information in said database corresponding to said bill payer according to said communications; and

f. sending and receiving communications to and from at least one financial entity based at least in part on communications from said bill payer and to alter information in said database corresponding to said bill of said bill payer, according at least in part to said communications.

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37. The method of claim 36 further comprising the step of detecting and responding to communications from a biller, by at least retrieving information from said database corresponding to said biller and presenting it to said biller in a form requested by said biller.

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38. The method of claim 36 further comprising the step of reporting information to billers relating at least to status of payment on their bills presented to said system.

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39. A system for presenting and paying bills, comprising:

a. an extractor functionality which is adapted to parse billing data from a plurality of billers using rules according to which the extractor functionality is

programmed, corresponding to a plurality of data types, and to provide relevant information for further use by said system;

b. a common document model processing functionality adapted to transform said relevant information into a common document model, which common document model is adapted to accommodate said relevant information from the plurality of billers and according to the plurality of data types;

c. a database adapted to store the transformed information from the common document model processing functionality; and

d. presentation functionality adapted to retrieve information from said database and output at least some of said information via a network for use by bill payers; and

e. a bill payer interface coupled to said database adapted to allow a bill payer to pay bills electronically.

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40. The system of claim 39 in which said interface is adapted to allow said bill payer to specify the location of said output.

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41. A system for presenting and paying bills, comprising:

a. parsing functionality which is adapted to parse billing data from a plurality of billers using rules according to which the parsing functionality is programmed, said billing data corresponding to a plurality of data types, and to provide relevant information for further use by said system;

b. a common document model processing functionality adapted to transform said relevant information into a common document model, which common document model is adapted to accommodate said relevant information from the plurality of billers and according to the plurality of data types;

c. a database adapted to store the transformed information from the common document model processing functionality;

d. a presentation functionality adapted to retrieve information from said database and output at least some of said information via a network for use by bill payers; and

e. a biller interface coupled to said database adapted to allow a biller to identify market segments of bill payers according to market rules and information retrieved from said database.

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42. A system according to claim 41 in which the biller interface is further adapted to allow the biller to alter appearance and content of bills presented to bill payers based on the market segments.

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43. A system according to claim 41 in which the biller interface is further adapted to allow the biller to send marketing messages to bill payers based on the market segments.



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44. A system according to claim 41 in which the biller interface is further adapted to allow the biller to communicate with bill payers regarding bills based on the market segments.

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45. A system for presenting and paying bills, comprising:

- a. parsing functionality which is adapted to parse billing data from a plurality of billers using rules according to which the parsing functionality is programmed, said billing data corresponding to a plurality of data types, and to provide relevant information for further use by said system;
- b. a common document model processing functionality adapted to transform said relevant information into a common document model, which common document model is adapted to accommodate said relevant information from the plurality of billers and according to the plurality of data types;
- c. a database adapted to store the transformed information from the common document model processing functionality;
- d. a presentation functionality adapted to retrieve information from said database and output at least some of said information via a network for use by bill payers; and
- e. interactivity functionality adapted to detect and respond to communications from a biller regarding market segments of bill payers by retrieving information from said database and altering appearance and content of bills presented to bill payers based on said communications.

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46. A system for presenting and paying bills, comprising:

a. parsing functionality which is adapted to parse billing data from a plurality of billers using rules according to which the parsing functionality is programmed, said billing data corresponding to a plurality of data types, and to provide relevant information for further use by said system;

b. a common document model processing functionality adapted to transform said relevant information into a common document model, which common document model is adapted to accommodate said relevant information from the plurality of billers and according to the plurality of data types;

c. a database adapted to store the transformed information from the common document model processing functionality;

d. a presentation functionality adapted to retrieve information from said database and output at least some of said information via a network for use by bill payers; and

e. interactivity functionality adapted to detect and respond to communications from a biller regarding market segments of bill payers by retrieving information from said database and sending marketing messages to bill payers based on said communications.

47. A system for presenting and paying bills, comprising:

a. parsing functionality which is adapted to parse billing data from a plurality of billers using rules according to which the parsing functionality is programmed, said billing data corresponding to a plurality of data types, and to provide relevant information for further use by said system;

b. a common document model processing functionality adapted to transform said relevant information into a common document model, which common document model is adapted to accommodate said relevant information from the plurality of billers and according to the plurality of data types;

c. a database adapted to store the transformed information from the common document model processing functionality;

d. a presentation functionality adapted to retrieve information from said database and output at least some of said information via a network for use by bill payers; and

e. interactivity functionality adapted to detect and respond to communications from a biller regarding market segments of bill payers by retrieving information from said database and altering information in said database corresponding to bill payers according to said communications.

48. A system for presenting and paying bills, comprising:

a. parsing functionality which is adapted to parse billing data from a plurality of billers using rules according to which the parsing functionality is programmed, said

billing data corresponding to a plurality of data types, and to provide relevant information for further use by said system;

b. a common document model processing functionality adapted to transform said relevant information into a common document model, which common document model is adapted to accommodate relevant information from the plurality of billers and according to the plurality of data types;

c. a database adapted to store the transformed information from the common document model processing functionality;

d. a presentation functionality adapted to retrieve information from said database and output at least some of said information via a network for use by bill payers; and

e. an agent interface coupled to said database adapted to allow an agent having an agency relationship with a biller to communicate with bill payers regarding bills.

48. A system according to claim 48 in which the agent interface is further adapted to allow the agent to communicate with the biller regarding bills of said bill payers.

49. A system for presenting and paying bills, comprising:

a. parsing functionality which is adapted to parse billing data from a plurality of billers using rules according to which the parsing functionality is programmed, said

billing data corresponding to a plurality of data types, and to provide relevant information for further use by said system;

b. a common document model processing functionality adapted to transform said relevant information into a common document model, which common document model is adapted to accommodate relevant information from the plurality of billers and according to the plurality of data types;

c. a database adapted to store the transformed information from the common document model processing functionality;

d. a presentation functionality adapted to retrieve information from said database and output at least some of said information via a network for use by bill payers;

e. bill payer interactivity functionality adapted to detect and respond to communications from a bill payer, by at least retrieving information from said database corresponding to said bill payer and presenting said information to said bill payer in a form requested by said bill payer; and

f. biller interactivity functionality adapted to detect and respond to communications from a biller, by at least retrieving information from said database corresponding to said biller and presenting said information to said biller in a form requested by said biller.

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A system according to claim 50 in which the biller interactivity functionality and the bill payer interactivity functionality are further adapted to present substantially the

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